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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,525

02/18/2004

Floyd Backers

160-053

2448

34845

7590

03/27/2006

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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/781,525

Applicant(s)

BACKERS ET AL.

Examiner

Justin M. Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20051025.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection. Specifically, applicant's argument that the newly added limitations of the amended claims 1-6 are not taught by Karaoguz are moot, since these limitations are clearly taught by the newly cited art of Lee et al. as discussed in the following office action.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2004/0054767 A1 by Karaoguz et al. in view of U.S. Patent Application Publication No. US 2005/0117524 A1 by Lee et al.

Regarding claim 1, Karaoguz teaches a method for use by an access point (e.g., access points 410a-n, see FIG. 4) in a wireless communications environment including multiple access points (e.g., access points 410a-n in FIG. 4) and stations (e.g., wireless devices 415a-n), wherein stations gain network access by associating with one or more of the access points (e.g., see paragraph 0021), comprising: collecting bid messages (e.g., see paragraphs 0029-0036 regarding

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access points gathering location and identity information of the wireless devices and transmitting range messages to the stations) from stations (e.g., wireless devices 415a-n), each bid message (e.g., comprising location and identity information) being a request from one station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device establishes communication with the access point) and including at least one parameter (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042 regarding location information); and causing the station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device further establishes communication with the access point). However, Karaoguz teaches the *station* (not the access point) comprises the functional elements for causing the access point-to-station association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point). Furthermore, Karaoguz may not specifically disclose selecting one of the bid messages.

While Karaoguz teaches the station comprises the functional elements for causing the association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point), it is first noted that applicant's claim recites "A method *for use* in an access point", and the intended use language following "for use" is not given patentable weight per MPEP 2111.04. Thus, the claim does not require the method to be performed in an access point. Furthermore, in the event the claim is amended to require the method being performed in an access point, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in

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the art to shift the location of association elements from the station to the access point (i.e., wherein bid messages would be sent from the station and accept messages from the access point) since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950). However, Karaoguz may not specifically disclose selecting the bid messages.

Lee, like Karaoguz, also teaches a method for use in an access point in a wireless communications environment (e.g., see abstract), and further, specifically teaches an access point comprises the functional elements for causing the access point-to-station association (e.g., see FIG. 6 and paragraphs 0064-0067 regarding functions performed by access point AP).

Additionally, the bid messages in Lee are indicative of a request to associate (e.g., see FIG. 5 regarding reassociation requests), and selecting at least one of the bid messages (e.g., requests) based at least in part on a parameter (e.g., see paragraph 0044 regarding “distance between APs should be considered”). Finally, the teachings of Lee provide both a secure quality of service and a high-speed roaming service for IEEE 802.11 communications (e.g., see paragraphs 0068-0069). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the IEEE 802.11 communications teachings of Lee to the IEEE 802.11 communications method of Karaoguz (e.g., see Karaoguz, paragraph 0016 regarding IEEE 802.11) in order to provide station/access-point communications with a secure quality of service and a high-speed roaming (e.g., see paragraphs 0068-0069).

Regarding claim 2, Karaoguz teaches the at least one parameter includes a distance from the access point (e.g., see paragraph 0033 regarding range message comprising location

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information indicating the distance range; see also paragraph 0041-0042 regarding location information).

Regarding claim 3, Karaoguz teaches a parameter is the number of stations associated with the access point (e.g., inherently represented by the identity information of each wireless device associated with the access point, see paragraph 0024). Further, Lee teaches the selecting step is based at least in part on this parameter (e.g., see paragraph 0044 regarding “distance between APs should be considered”). Additionally, as discussed above, the teachings of Lee provide both a secure quality of service and a high-speed roaming service for IEEE 802.11 communications (e.g., see paragraphs 0068-0069). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the IEEE 802.11 communications teachings of Lee to the IEEE 802.11 communications method of Karaoguz (e.g., see Karaoguz, paragraph 0016 regarding IEEE 802.11) in order to provide station/access-point communications with a secure quality of service and a high-speed roaming (e.g., see paragraphs 0068-0069).

Regarding claim 5, while Karaoguz may not specifically disclose sending an accept message for causing association between the station and access point only if a maximum number of associations has not been exceeded, Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the number of permissible associations in the network cannot be exceeded. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to send an accept message only if a maximum number of associations has not been exceeded, since Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the number of permissible associations in the network cannot be exceeded.

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Regarding claim 6, Karaoguz in view of Lee teach the method as discussed above regarding claims 1-4. That is, Karaoguz teaches a method for use in an access point (e.g., access point 115, see FIG. 1) in a wireless communications environment (e.g., wireless network 110) including multiple access points (e.g., see paragraphs 0019-0021 regarding a plurality of access points) and stations (e.g., wireless devices 120a-120n), wherein stations (e.g., 120a-120n) gain network access by associating with one or more of the access points (e.g., 115), comprising the steps of: collecting bid messages (e.g., see paragraphs 0029-0036 regarding access points gathering location and identity information of the wireless devices and transmitting range messages to the stations) from stations (e.g., wireless devices 415a-n), each bid message (e.g., comprising location and identity information) being a request from one station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device establishes communication with the access point) and including at least one parameter (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042 regarding location information); keeping track of the collected parameters related to stations in the network (e.g., gathering and storing statistical information such as location and identity information of the wireless devices 120-120n, power levels, channel cycling, frequencies, coverage area, traffic patterns, etc., see paragraph 0024); and causing a station (e.g., 120a-120n) to become associated with the access point (e.g., 115) based upon the one or more parameters (e.g., see paragraph 0045 regarding modifying the network to achieve optimized network configuration based upon the location information and statistical information; see also paragraph 0021 regarding a wireless devices receiving coverage from an access point in the geographic area upon the access point powering on, and paragraph 0028 regarding adjusting

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transmission power levels for optimal network configuration for continued coverage in accordance with the stored information). Further, as discussed above regarding claim 2, Karaoguz teaches receiving messages from stations, wherein the messages include at least some of the one or more parameters (e.g., see paragraphs 0029-0038 regarding determining device location, and specifically paragraph 0036 regarding the wireless device sending a range message acknowledgement). Still further, as discussed above regarding claim 3, Karaoguz teaches a parameter is the number of stations associated with the access point (e.g., inherently represented by the identity information of each wireless device associated with the access point, see paragraph 0024). Finally, as discussed above regarding claim 4, Karaoguz teaches a parameter is the distance of a station (e.g., wireless device 120a-120n) from the access point (e.g., 115) (e.g., see paragraphs 0029-0038, and specifically paragraph 0029 regarding determining a distance range location information of a wireless device). However, Karaoguz teaches the *station* (not the access point) comprises the functional elements for causing the access point-to-station association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point). Furthermore, Karaoguz may not specifically disclose selecting one of the bid messages.

While Karaoguz teaches the station comprises the functional elements for causing the association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point), it is first noted that applicant's claim recites "A method *for use* in an access point", and the intended use language following "for use" is not given patentable weight per MPEP 2111.04. Thus, the claim does not require the method to be performed in an access point. Furthermore, in the event the claim is

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amended to require the method being performed in an access point, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of association elements from the station to the access point (i.e., wherein bid messages would be sent from the station and accept messages from the access point) since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950). However, Karaoguz may not specifically disclose selecting the bid messages.

Lee, like Karaoguz, also teaches a method for use in an access point in a wireless communications environment (e.g., see abstract), and further, specifically teaches an access point comprises the functional elements for causing the access point-to-station association (e.g., see FIG. 6 and paragraphs 0064-0067 regarding functions performed by access point AP). Additionally, the bid messages in Lee are indicative of a request to associate (e.g., see FIG. 5 regarding reassociation requests), and selecting at least one of the bid messages (e.g., requests) based at least in part on a parameter (e.g., see paragraph 0044 regarding “distance between APs should be considered”). Finally, the teachings of Lee provide both a secure quality of service and a high-speed roaming service for IEEE 802.11 communications (e.g., see paragraphs 0068-0069). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the IEEE 802.11 communications teachings of Lee to the IEEE 802.11 communications method of Karaoguz (e.g., see Karaoguz, paragraph 0016 regarding IEEE

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802.11) in order to provide station/access-point communications with a secure quality of service and a high-speed roaming (e.g., see paragraphs 0068-0069).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lee, further in view of U.S. Patent No. 6,266,537 to Kashitani et al.

Regarding claim 4, Karaoguz in view of Lee teaches the method discussed above regarding claim 1, however, may not specifically disclose selecting the bid message from the closest station in terms of distance.

Kashitani also teaches a method for associating stations and access points, and specifically discloses associating occurs when the parameter received indicates the closest distance (e.g., see col. 7, lines 23-32 – col. 8, line 58 regarding polling response signals responding to long-distance ranges or short-distance ranges). The teachings of Kashitani provides reduced interference and increased reliability for wireless transmissions (e.g., see col. 3, line 47 – col. 4, line 26). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Kashitani to the method of Karaoguz in view of Lee in order to provide reduced interference and increased reliability for wireless transmissions.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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6. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

7. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/780,593. Although the conflicting claims are not identical, they are not patentably distinct from each other because each recites logic performing identical functions. Specifically, Application No. 10/780,593 comprises claims that are narrower versions of the instant application such that all of the limitations from independent claim 1 of the instant application are included in independent claim 1 of Application No. 10/780,593, except that claim 1 of the instant applications recites "each bid message *being* a request ... to associate" whereas claim 1 of Application No. 10/780,593 recites "each bid message *indicative* of a request to associate". At the time of the invention it would have been obvious to one of ordinary skill in the art for a bid message that is *indicative* of a request to associate to in fact *be* a request to associate.

9. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. This double-patenting rejection must be addressed by applicant in applicant's response to this Final office action, e.g., by filing a terminal disclaimer in compliance with 37 CFR 1.321(c). A response which fails to respond to this rejection will be considered to be non-responsive.

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***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Justin M Philpott  
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SUPERVISORY PATENT EXAMINER  
3/24/08